Lab Exercise 7– Creating Multiple IAM Users in Terraform Objective:
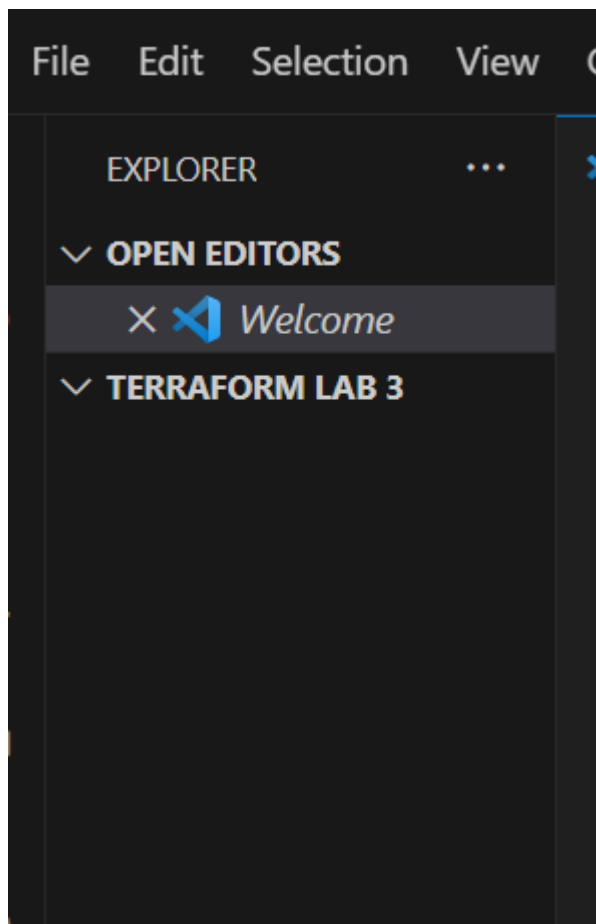
Learn how to use Terraform to create multiple IAM users with unique settings.

Prerequisites:

- Terraform installed on your machine.
- AWS CLI configured with the necessary credentials.

Steps:

1. Create a Terraform Directory:

Create Terraform Configuration Files:
- Create a file named main.tf:

main.tf ✕   **iamuser.tf**   Extension: HashiCorp Terraform

main.tf > terraform

```hcl
terraform {
  required_providers {
    aws = {
      source = "hashicorp/aws"
      version = "5.35.0"
    }
  }
}


provider "aws" {
  region = "us-east-1"
}
```

main.tf   **iamuser.tf** ✕   Extension: HashiCorp Terraform

iamuser.tf > ...

```hcl
variable "iam_users" {
  type    = list(string)
  default = ["user1", "user2", "user3"]
}

resource "aws_iam_user" "iam_users" {
  count = length(var.iam_users)

  name = var.iam_users[count.index]

  tags = {
    Name = "${var.iam_users[count.index]}-upes"
  }
}
```

2. Initialize and Apply:

```
Terraform has been successfully initialized!

You may now begin working with Terraform. Try running "terraform plan" to see
any changes that are required for your infrastructure. All Terraform commands
should now work.

If you ever set or change modules or backend configuration for Terraform,
rerun this command to reinitialize your working directory. If you forget, other
commands will detect it and remind you to do so if necessary.
PS F:\terraform lab\terraform lab 3>
```

```
PS F:\terraform lab\terraform lab 3> terraform plan

Terraform used the selected providers to generate the following execution plan. Resource actions are indicated with the following
symbols:
  + create

Terraform will perform the following actions:

  # aws_iam_user.iam_users[0] will be created
  + resource "aws_iam_user" "iam_users" {
      + arn           = (known after apply)
      + force_destroy = false
      + id            = (known after apply)
      + name          = "user1"
      + path          = "/"
      + tags          = {
          + "Name" = "user1-upes"
        }
      + tags_all      = {
          + "Name" = "user1-upes"
        }
      + unique_id     = (known after apply)
    }

  # aws_iam_user.iam_users[1] will be created
  + resource "aws_iam_user" "iam_users" {
      + arn           = (known after apply)
      + force_destroy = false
      + id            = (known after apply)
```

```
  Plan: 3 to add, 0 to change, 0 to destroy.

  Do you want to perform these actions?
    Terraform will perform the actions described above.
    Only 'yes' will be accepted to approve.

    Enter a value: yes
```

```
  Enter a value: yes

aws_iam_user.iam_users[1]: Creating...
aws_iam_user.iam_users[0]: Creating...
aws_iam_user.iam_users[2]: Creating...
aws_iam_user.iam_users[2]: Creation complete after 2s [id=user3]
aws_iam_user.iam_users[0]: Creation complete after 3s [id=user1]
aws_iam_user.iam_users[1]: Creation complete after 3s [id=user2]

Apply complete! Resources: 3 added, 0 changed, 0 destroyed.
PS F:\terraform lab\terraform lab 3>
```